

**DEVICES AND METHODS FOR PROTECTING WINDINGS AROUND A
SHARP EDGED CORE**

Abstract

Electromagnetic devices are provided including an electrically conductive core
5 having an inner diameter defining an opening therethrough and an outer diameter, the
core having sharp edges extending circumferentially around the inner diameter and
around the outer diameter thereof. A plurality of polymeric protection members are
wrapped circumferentially around the core and positioned adjacent the sharp edges of
the core. The protection members have a short leg positioned adjacent an end of the
10 core. The short leg may have a length selected to provide a substantially flat surface
on the end of the core when the protection members are wrapped around the core. In
various embodiments, an adhesive layer may be provided between the protection
members and the core. A coated wire is wrapped around the core so as to be
magnetically coupled thereto and around the polymeric protection members so as to
15 be displaced from the sharp edges of the core. Polymeric protection members and
methods for manufacturing such members and for fabricating devices using such
members are also provided.